Claims

- 1. Locking ring for axially fixing a shaft part (3) in a ring part (1), where the shaft part (3) has an peripheral groove (41) and the ring part (1) has an inner groove (21), in which the locking ring (5) comprising an opening in the circumferential direction engages in the fixed state, characterized in that the locking ring (5) has first partial areas (56.57, 51,53), that engage in the inner groove (21) after the resiliently pressing together the locking ring (5), so that so that it can be placed in the inner opening (21) of the ring part (1), pushing the locking ring into the area of the inner groove (21) (5) releasing and expanding the locking ring (5) and also has second partial areas (52, 54, 55) that project from the inner groove (21) once the locking ring (5) has been placed in the inner groove (21) and which are resiliently pushed outward in a phase (7) of the shaft part (3) which has been pushed into the inner opening (2) so that the safety ring (5) can slide on the periphery of the shaft part (3) until it reaches the area of the peripheral groove (41) and the second partial areas (52, 54, 55) resiliently snap onto said peripheral groove.
- 2. Locking ring pursuant to claim 1, characterized in that, the first and second partial areas are each distributed evenly over the periphery of the inner groove (21) and/or the peripheral groove (41).
- 3. Locking ring pursuant to claim 1 or 2, characterized in that, it has the shape of a triangle formed from a

base part (52) and two side parts (54, 55) connected to the former, where the first partial areas are formed by the two corner areas (51, 53) between the base part and the side parts and the free end areas (56, 57) of the side parts of the triangle and the second partial areas are formed by the middle areas of the base part (52) and the side parts (54, 55).

- 4. Locking ring pursuant to claim 3, characterized in that, the side parts (54, 55) and the base part (52) form an equilateral triangle.
- 5. Locking ring pursuant to claim 1 or 2, characterized in that, it has the shape of a triangle (5'; 5'') with side parts and corner areas, where the first partial areas are formed by the corner areas (51', 52', 53'; 51'', 52'', 53'', 54'', 55'') and the free end areas (56', 57'; 56'', 57'') adjoining the opening of the locking ring (5'; 5'') and where the second partial areas are formed by the middle areas of the side parts of the triangle.
- 6. Locking ring pursuant to claim 1 or 2, characterized in that, it has an oval or elliptical shape, where the first partial areas are formed by areas of the largest diameter of the locking ring (5'''), where the opening and the end areas (56''', 57''') of the locking ring are arranged in an area of the largest diameter of the locking ring (5''') and where the second partial areas are formed by their middle areas of the locking ring (5''') that lie between the areas of the largest diameter.

- 7. Locking ring pursuant to any of the claims 1 to 6, characterized in that, the corner areas (51, 53) are rounded off.
- 8. Locking ring pursuant to claim 7, characterized in that, the rounding of the corner areas (51, 53) is adjusted to the radius of the base (22) of the inner groove (21).
- 9. Locking ring pursuant to any of the claims 1 to 8, characterized in that, it has a circular, oval, rectangular, quadratic or polygonal design in its material cross-section.